



*Tennessee Education Lottery*  
*Estimates for Net Lottery Proceeds &  
After-School Funding*

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*December 11, 2014*





# *Historical Results*

	<i>FY10-11</i>	<i>FY11-12</i>	<i>FY12-13</i>	<i>FY13-14</i>
<i>Total Revenue</i>	\$1,106,678,193	\$1,221,573,973	\$1,280,366,277	\$1,323,572,632
<i>Prize Expense</i>	\$695,149,156	\$770,568,219	\$812,547,301	\$850,790,713
<i>Retailer Commissions</i>	\$77,456,838	\$85,525,965	\$89,258,881	\$92,492,072
<i>Operating Expense</i>	\$15,698,291	\$17,212,674	\$16,916,511	\$17,313,853
<i>Other Expenses</i>	\$36,527,537	\$37,917,640	\$40,101,263	\$39,994,473
<i>Total Expenses</i>	\$824,831,822	\$911,224,498	\$958,823,956	\$1,000,591,111
<i>Net Lottery Proceeds</i>	\$281,846,371	\$310,349,475	\$321,542,321	\$322,981,521
<i>After-School Funding</i>	\$11,643,581	\$13,089,186	\$18,170,504	\$14,290,845
<i>Total State Proceeds</i>	\$293,489,952	\$323,438,661	\$339,712,825	\$337,272,366





# *Actual Growth in FY13-14*

	FY12-13	FY13-14	Growth
Instant Games (Net)	\$996,423,521	\$1,051,315,504	5.51%
Cash 3 and Cash 4	\$86,382,831	\$88,488,829	2.44%
PB, MM, & Hot Lotto	\$167,542,663	\$161,108,414	-3.84%
Tennessee Cash	\$24,871,472	\$18,342,570	-26.25%
Misc. Revenue	\$5,145,790	\$4,317,315	-16.10%
Total Net Revenue	\$1,280,366,277	\$1,323,572,632	3.37%
Total Expenses	\$958,823,956	\$1,000,591,111	4.36%
NET LOTTERY PROCEEDS	<u>\$321,542,321</u>	<u>\$322,981,521</u>	<u>0.45%</u>
After-School Proceeds	\$18,170,504	\$14,290,845	-21.35%
TOTAL STATE PROCEEDS	<u>\$339,712,825</u>	<u>\$337,272,366</u>	<u>-0.72%</u>





## *Instant Game Growth in FY13-14*

<b>Price Point</b>	<b>Percent of Instant Game Sales</b>	<b>FY12-13 Gross Sales (Millions)</b>	<b>FY13-14 Gross Sales (Millions)</b>	<b>Percent Sales Growth</b>	<b>Dollar Growth (Millions)</b>
<b>\$1</b>	<b>8.0%</b>	<b>\$96.4</b>	<b>\$91.7</b>	<b>-4.9%</b>	<b>-\$4.7</b>
<b>\$2</b>	<b>20.1%</b>	<b>\$229.7</b>	<b>\$230.9</b>	<b>0.5%</b>	<b>\$1.2</b>
<b>\$3</b>	<b>7.7%</b>	<b>\$79.4</b>	<b>\$88.4</b>	<b>11.3%</b>	<b>\$9.0</b>
<b>\$5</b>	<b>22.8%</b>	<b>\$270.3</b>	<b>\$262.1</b>	<b>-3.0%</b>	<b>-\$8.2</b>
<b>\$10</b>	<b>16.9%</b>	<b>\$169.7</b>	<b>\$193.7</b>	<b>14.1%</b>	<b>\$24.0</b>
<b>\$20</b>	<b>15.1%</b>	<b>\$204.6</b>	<b>\$173.7</b>	<b>-15.1%</b>	<b>-\$30.9</b>
<b>\$25</b>	<b>9.4%</b>	<b>\$38.5</b>	<b>\$108.7</b>	<b>182.3%</b>	<b>\$70.2</b>





## *Growth in Numbers Games – FY13-14*

- **CASH 3:**

- *FY12-13 sales: \$57,163,661*
- *FY13-14 sales: \$57,673,163*
- *FY13-14 dollar growth: + \$509,502*
- *FY13-14 percent growth: + 0.9%*

- **CASH 4:**

- *FY12-13 sales: \$29,219,170*
- *FY13-14 sales: \$30,815,666*
- *FY13-14 dollar growth: + \$1,596,496*
- *FY13-14 percent growth: + 5.5%*





## *Powerball Growth in FY13-14*

- *FY12-13 sales: \$133,207,374*
- *FY13-14 sales: \$100,950,615*
- *FY13-14 dollar growth: - \$32,256,759*
- *FY13-14 percent growth: - 24.2%*

<i>Fiscal Year</i>	<i>Average Jackpot Cycle</i>	<i>Highest Jackpot Cycle</i>	<i>Drawings with Jackpots \$250.0 Million or More</i>	<i>Jackpot Winners</i>
<b>FY12-13</b>	<b>\$121,620,192</b>	<b>\$590,500,000</b>	<b>10</b>	<b>15</b>
<b>FY13-14</b>	<b>\$118,090,385</b>	<b>\$448,400,000</b>	<b>9</b>	<b>11</b>







## *Mega Millions Growth in FY13-14*

- *FY12-13 sales: \$31,920,994*
- *FY13-14 sales: \$47,042,505*
- *FY13-14 dollar growth: + \$15,121,511*
- *FY13-14 percent growth: + 47.4%*

<i>Fiscal Year</i>	<i>Average Jackpot Cycle</i>	<i>Highest Jackpot Cycle</i>	<i>Drawings with Jackpots \$100.0 Million or More</i>	<i>Jackpot Winners</i>
<b>FY12-13</b>	<b>\$42,855,769</b>	<b>\$190,000,000</b>	<b>9</b>	<b>15</b>
<b>FY13-14</b>	<b>\$98,201,923</b>	<b>\$636,000,000</b>	<b>35</b>	<b>8</b>





## *Hot Lotto Growth in FY13-14*

- *FY12-13 sales: \$2,414,295 (Partial Year)*
- *FY12-13 sales: first week of sales were 05/18/2013*
- *FY13-14 sales: \$13,115,294 (Full Year)*
- *FY13-14 dollar growth: + \$10,700,999*
- *FY13-14 percent growth: + 443.2% (not true growth)*
- *Have not seen two complete fiscal years of sales data*
- *Introduction probably cannibalized sales for Powerball and other multi-jurisdictional games in FY13-14.*







## *Tennessee Cash Growth in FY13-14*

- *FY12-13 sales: \$24,871,472*
- *FY13-14 sales: \$18,342,570*
- *FY13-14 dollar growth: - \$6,528,902*
- *FY13-14 percent growth: - 26.3%*

<i>Fiscal Year</i>	<i>Average Jackpot Cycle</i>	<i>Highest Jackpot Cycle</i>	<i>Drawings with Jackpots \$750,000 or More</i>	<i>Jackpot Winners</i>
<b>FY12-13</b>	<b>\$525,545</b>	<b>\$2,200,000</b>	<b>32</b>	<b>11</b>
<b>FY13-14</b>	<b>\$385,764</b>	<b>\$1,240,000</b>	<b>12</b>	<b>13</b>





# *All Jackpot Games in FY13-14*

- *Includes Powerball, Mega Millions, Hot Lotto, and Tennessee Cash*
- *FY12-13 combined sales: \$192,414,135*
- *FY13-14 combined sales: \$179,450,984*
- *FY13-14 net dollar growth: - \$12,963,151*
- *FY13-14 percent growth: - 6.7%*

<i>Game</i>	<i>FY12-13</i>	<i>FY13-14</i>	<i>Difference</i>	<i>Percent Change</i>
Powerball	\$133,207,374	\$100,950,615	(\$32,256,759)	-24.2%
Mega Millions	\$31,920,994	\$47,042,505	\$15,121,511	47.4%
Hot Lotto	\$2,414,295	\$13,115,294	\$10,700,999	443.2%
TN Cash	\$24,871,472	\$18,342,570	(\$6,528,902)	-26.3%
Total	\$192,414,135	\$179,450,984	(\$12,963,151)	-6.7%





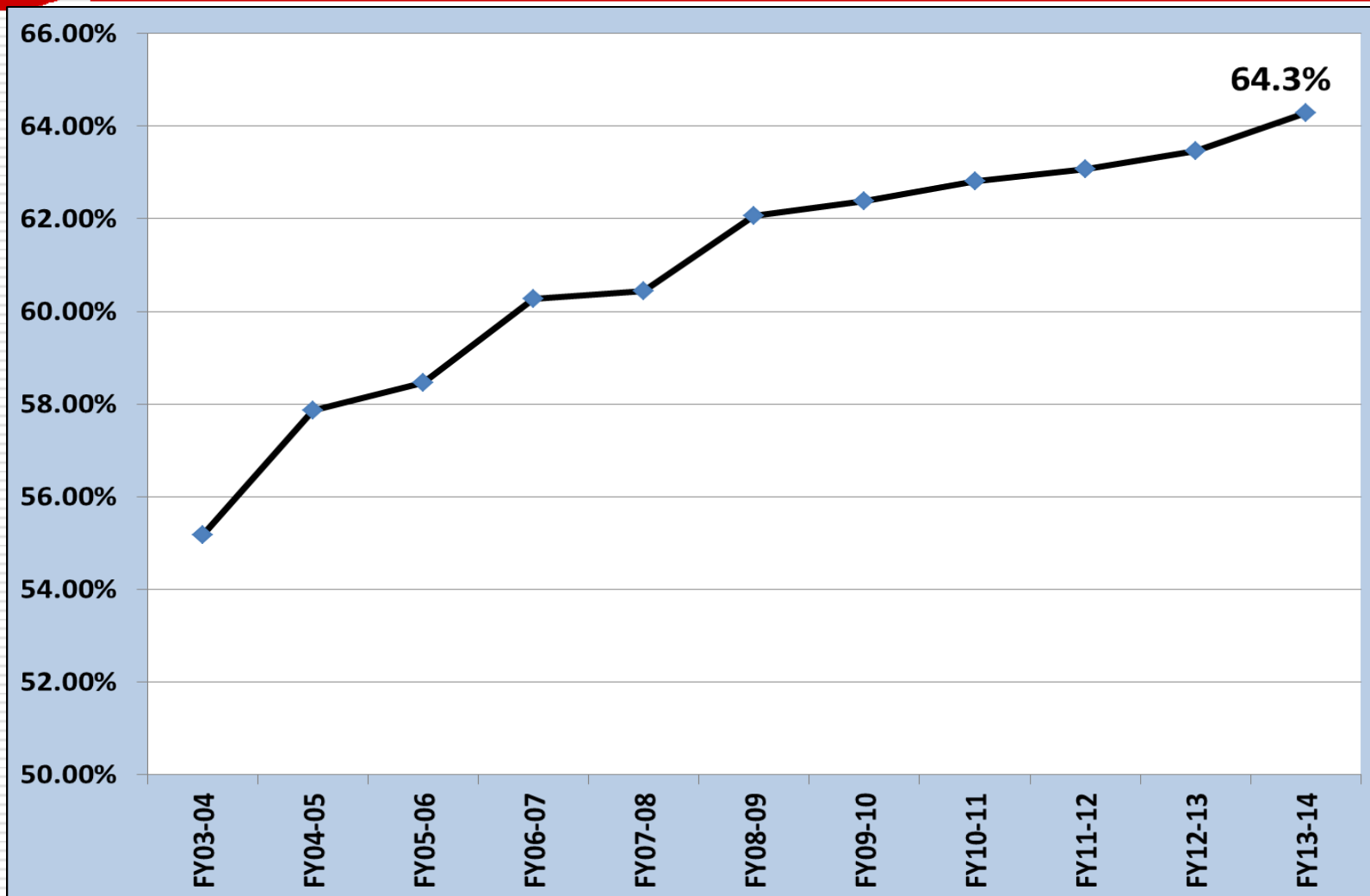
## *Revenue – Recap for FY13-14*

- ☐ *Total net revenue in FY13-14: \$1,323,572,632*
- ☐ *Total net revenue growth in FY13-14: 3.37%*
- ☐ *Majority of growth coming from instant game products (\$10 and \$25 price points) – 81% of sales*
- ☐ *Moderate growth in numbers games (C3 and C4) - 6% of sales*
- ☐ *Negative growth in jackpot based games – 13% of sales*
- ☐ *Last 3 years diminishing rates of growth (10.4%, 4.8%, and 3.4% respectively)*



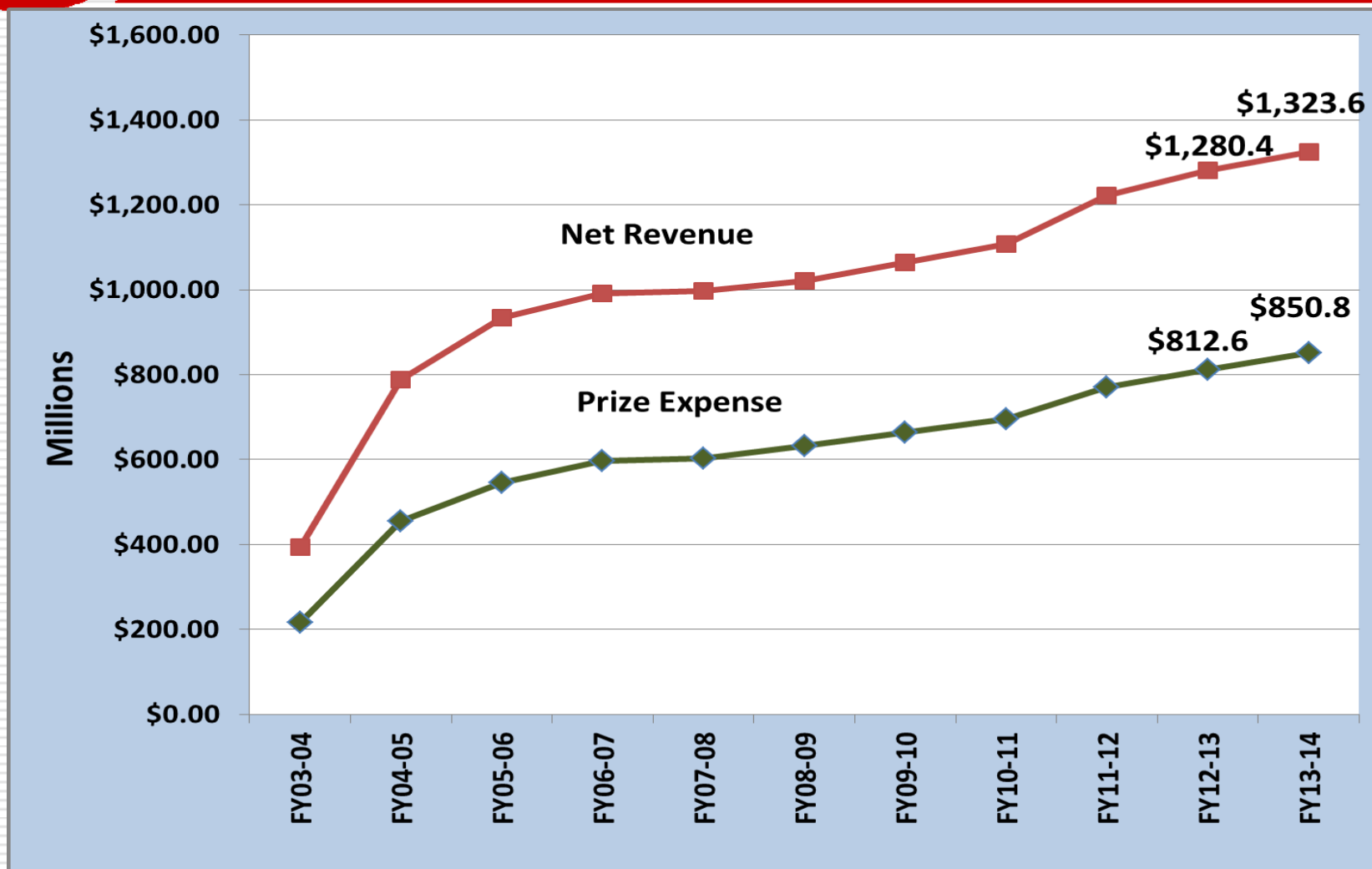


# *Prize Expense (as % of Revenue)*



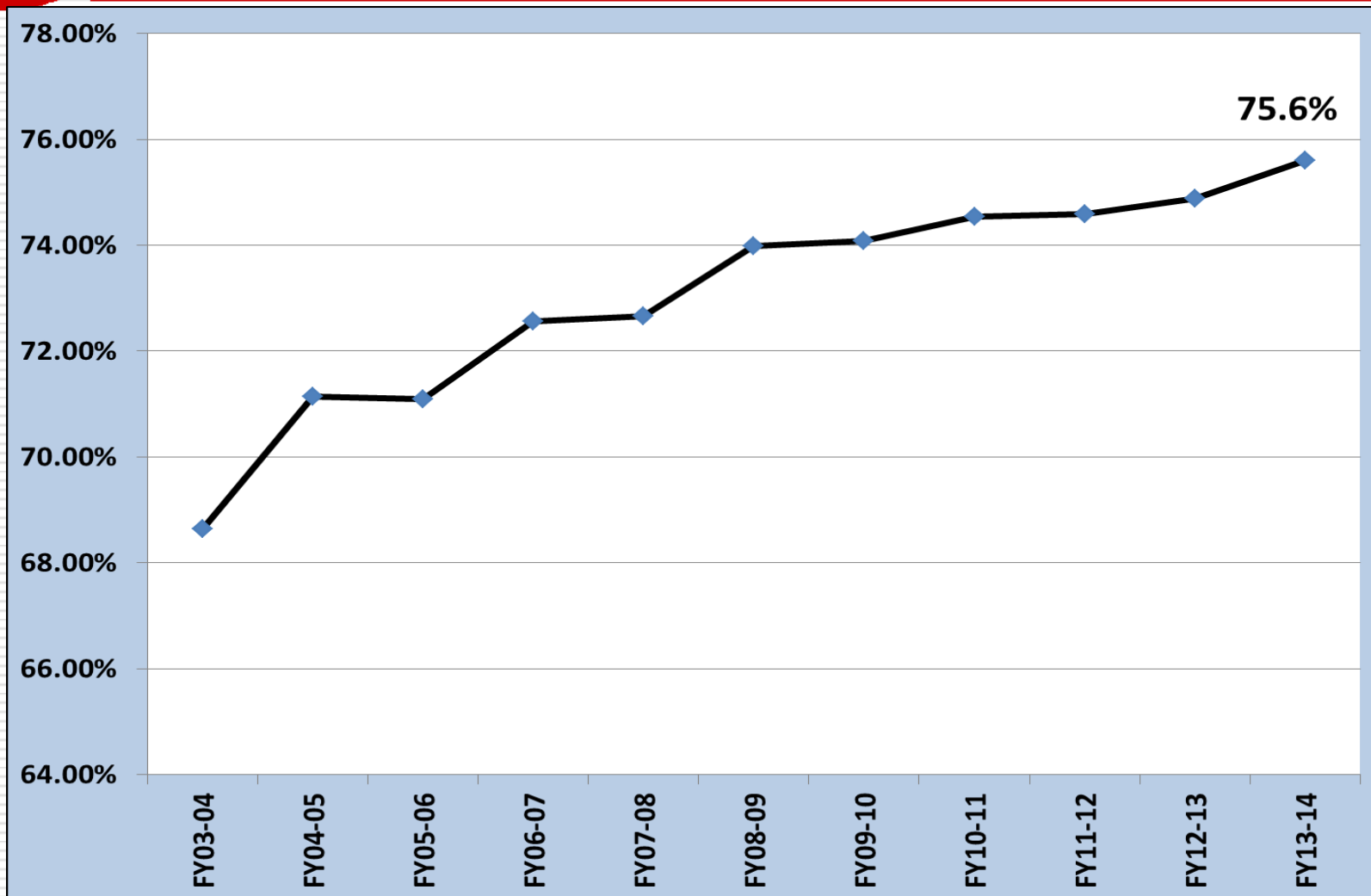


# *Revenue & Prize Expense (\$)*





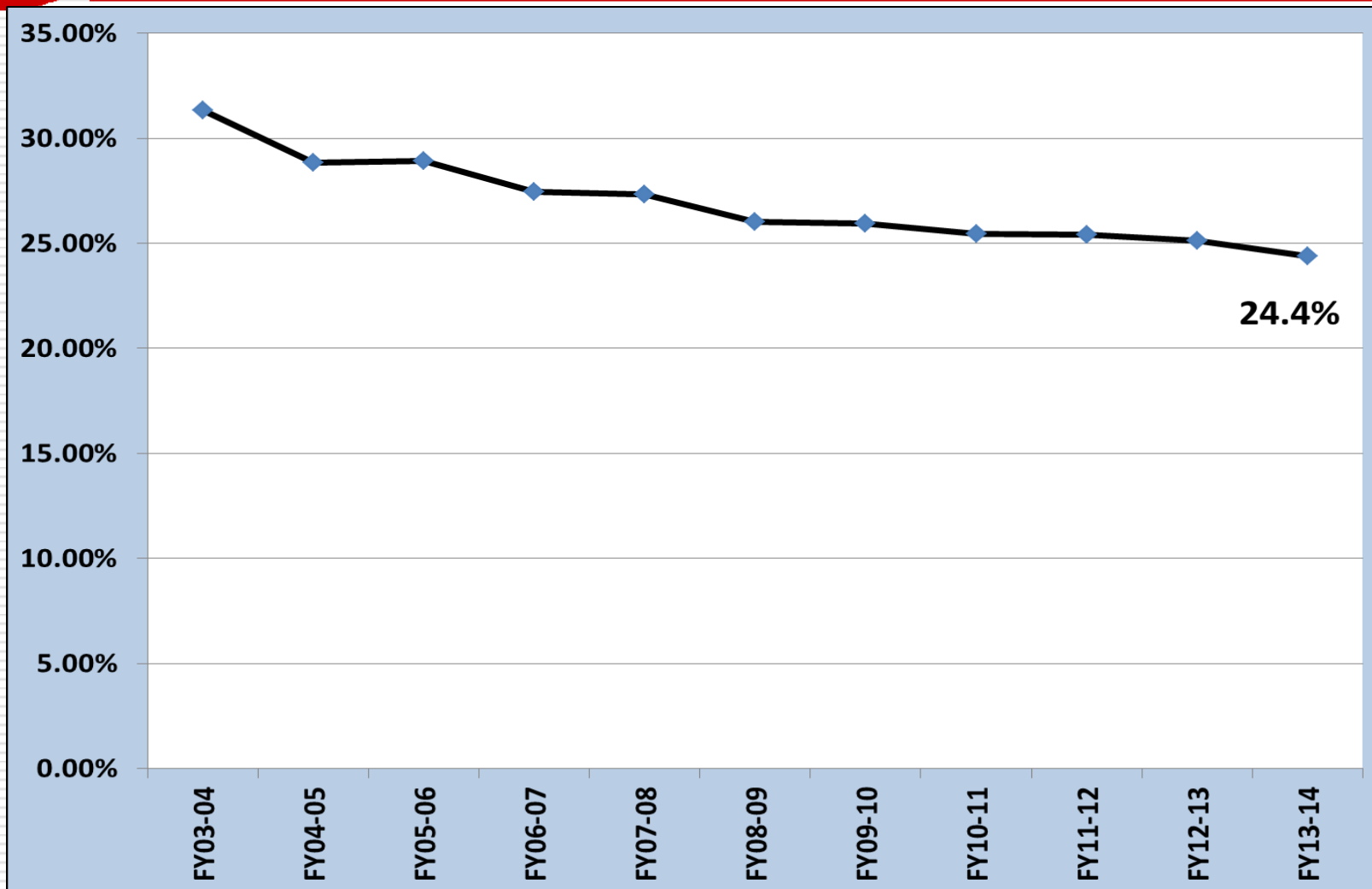
# *Total Expenses (as a % of Revenue)*







## *Net Lottery Proceeds (as a % of Revenue)*





## *Marginal Expense vs. Marginal Revenue*

	<i>Marginal Prize Expense</i>	<i>Marginal Expense</i>	<i>Marginal Revenue</i>	<i>Marginal Proceeds</i>
FY09-10	\$30,713,704	\$33,487,823	\$43,980,242	\$10,492,419
FY10-11	\$31,107,633	\$36,259,283	\$42,127,107	\$5,867,824
FY11-12	\$75,419,063	\$86,392,676	\$114,895,780	\$28,503,104
FY12-13	\$41,979,082	\$47,599,458	\$58,792,304	\$11,192,846
FY13-14	\$38,243,412	\$41,767,155	\$43,206,355	\$1,439,200





# *Profit (Proceeds) Maximization*

- *So when marginal proceeds get closer to \$0, closer to the profit maximization point (sweet spot).*
- *Occurs when marginal revenue = marginal expense*
- *At least for the same offering of games with a constant payout ratio.*
- *When this happens, lotteries must introduce something new (i.e. new game, new ways to win for existing games, modifications to payout ratios, matrix changes for jackpot games, etc...).*
- *FY14-15: Introduction of a new spotlight instant game (January 2015); implement changes to Powerball (April 2015); and the recent introduction of Monopoly Millionaires Club (October 2014).*





## *FY14-15: Year-to-Date*

- ☐ *As of October 31, 2014*
- ☐ *Total Net Revenue: + 0.9%*
  - *Instant Games: + 5.5%*
  - *Cash 3 and Cash 4: + 2.5%*
  - *Multi-Jurisdictional (PB, MM, HL, and MMC): - 25.6%*
  - *Tennessee Cash: + 18.4%*
- ☐ *Total Expenses: + 0.9%*
  - *Prize Expense: + 1.1%*
  - *Total Expenses / Total Net Revenue: 75.62%*
- ☐ *Net Lottery Proceeds (NLP): + 0.8%*
  - *Net Lottery Proceeds / Total Net Revenue: 24.38%*





# *Assumptions for FY14-15*

- *Changes for Powerball occur in April 2015*
- *No changes to MM or Hot Lotto*
- *Continued promotion and market development for MMC*
- *No changes to Cash 3, Cash 4, or TN Cash*
- *No new TN-exclusive online games*
- *Launch of one spotlight instant game in Jan. 2015*
- *Two more PB jackpot cycles above \$350 million*
- *Two more MM jackpot cycles above \$200 million*
- *No extraordinary changes to the retailer base*
- *No legislative changes*
- *Total Expenses = 75.8% of Total Net Revenue*
- *Net Lottery Proceeds = 24.2% of Total Net Revenue*





## *FY14-15 Estimates*

	Low	Median	Upper
Instant Games (Net)	\$1,090,000,000	\$1,100,000,000	\$1,110,000,000
Cash 3 and Cash 4	\$88,700,000	\$89,500,000	\$90,300,000
PB, MM, and Hot Lotto	\$136,000,000	\$140,000,000	\$144,000,000
Tennessee Cash	\$18,500,000	\$19,000,000	\$19,500,000
Monopoly Millionaires Club	\$5,500,000	\$6,000,000	\$6,500,000
Misc. Revenue	\$4,400,000	\$4,500,000	\$4,600,000
Total Net Revenue (100.0%)	\$1,343,100,000	\$1,359,000,000	\$1,374,900,000
Total Expenses (75.8%)	\$1,018,100,000	\$1,030,100,000	\$1,042,200,000
NET LOTTERY PROCEEDS (24.2%)	\$325,000,000	<u>\$328,900,000</u>	\$332,700,000
After-School Funding	\$13,500,000	\$14,000,000	\$14,500,000
TOTAL STATE PROCEEDS	\$338,500,000	<u>\$342,900,000</u>	\$347,200,000







## *Assumptions for FY15-16*

- *No new multi-jurisdictional games*
- *No changes to PB, MM, Hot Lotto, or MMC*
- *No changes to Cash 3, Cash 4, or TN Cash*
- *No new TN-exclusive online games*
- *Launch of at least one spotlight instant game*
- *At least 2 PB jackpot cycles above \$350 million*
- *At least 2 MM jackpot cycles above \$200 million*
- *No extraordinary changes to the retailer base*
- *No legislative changes*
- *Total Expenses = 76.1% of Total Net Revenue*
- *Net Lottery Proceeds = 23.9% of Total Net Revenue*





## *FY15-16 Estimates*

	Low	Median	Upper
Instant Games (Net)	\$1,125,000,000	\$1,145,000,000	\$1,165,000,000
Cash 3 and Cash 4	\$89,000,000	\$90,000,000	\$91,000,000
PB, MM, and Hot Lotto	\$135,000,000	\$140,000,000	\$145,000,000
Tennessee Cash	\$18,000,000	\$18,500,000	\$19,000,000
Monopoly Millionaires Club	\$6,000,000	\$7,000,000	\$8,000,000
Misc. Revenue	\$4,500,000	\$4,600,000	\$4,700,000
Total Net Revenue (100.0%)	\$1,377,500,000	\$1,405,100,000	\$1,432,700,000
Total Expenses (76.1%)	\$1,048,300,000	\$1,069,300,000	\$1,090,300,000
NET LOTTERY PROCEEDS (23.9%)	\$329,200,000	<u>\$335,800,000</u>	\$342,400,000
After-School Funding	\$13,500,000	\$14,000,000	\$14,500,000
TOTAL STATE PROCEEDS	\$342,700,000	<u>\$349,800,000</u>	\$356,900,000





# *Subsequent Years*

- Growth beyond FY15-16 is difficult to forecast due to a number of unknown factors such as:
  - *Changes to payout ratios*
  - *Matrix changes to jackpot based games*
  - *Structure changes to pari-mutuel and online games*
  - *Legislative action*
  - *Varying jackpot cycles*
  - *New and discontinued games*
  - *Changes to retailer base*
  - *Changes in advertising*
  - *Changes in economy*
  - *Changes in gas prices....*





## *FY16-17, FY17-18 and FY18-19*

*Estimated Growth for Total Net Revenue: 2.5% per year*

*Estimated Growth for Net Lottery Proceeds: 1.8% per year*

	FY16-17	FY17-18	FY18-19
<b>Total Net Revenue</b>	<b>\$1,440,227,000</b>	<b>\$1,476,233,000</b>	<b>\$1,513,139,000</b>
<b>Total Expenses</b>	<b>\$1,098,383,000</b>	<b>\$1,128,236,000</b>	<b>\$1,158,878,000</b>
<b>Net Lottery Proceeds</b>	<b><u>\$341,844,000</u></b>	<b><u>\$347,997,000</u></b>	<b><u>\$354,261,000</u></b>
<b>After-School Funding</b>	<b>\$14,200,000</b>	<b>\$14,400,000</b>	<b>\$14,600,000</b>
<b>Total State Proceeds</b>	<b><u>\$356,044,000</u></b>	<b><u>\$362,397,000</u></b>	<b><u>\$368,861,000</u></b>

